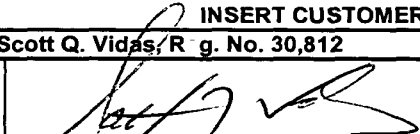


| | | | |
|---|---|------------------------|--|
| Vidas, Arrett & Steinkraus Utility Patent Application Transmittal | | Atty. Docket No | S40.2-11278-US01 |
| | | First Inventor | KIM, Ig Saeng, et al. |
| | | Title: | Heat Driven Acoustic Orifice Type Pulse Tube Cryocooler |
| | | Express Mail Label No. | EL 992794581 US |
| Application Elements | | Address To: | Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 |
| 1. | <input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Check Included | | Pages 1 |
| 2. | <input checked="" type="checkbox"/> Applicant claims small entity status | | |
| 3. | <input checked="" type="checkbox"/> Specification (including 0 pg cover sheet, 14 pg description, 3 pg claims and 1 pg abstract) | | Pages 18 |
| 4. | <input checked="" type="checkbox"/> Drawings | | Pages 6 |
| 5. | <input type="checkbox"/> Oath or Declaration a. <input type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d) (for continuation/divisional with Box 19 completed) i. <input type="checkbox"/> Deletion of Inventor(s) – signed statement attached deleting inventors named in the prior application | | Pages |
| 6. | <input checked="" type="checkbox"/> Application Data Sheet | | Pages 5 |
| 7. | <input type="checkbox"/> Assignment Papers (cover sheet & documents and check) <input type="checkbox"/> Previously recorded on , Reel , Frames | | Pages |
| 8. | <input type="checkbox"/> Power of Attorney <input type="checkbox"/> 37 C.F.R. 3.73(b) Statement (when there is an assignee) | | Pages |
| 9. | <input type="checkbox"/> English Translation Document | | Pages |
| 10. | <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Copies of Citations (references) | | Pages |
| 11. | <input type="checkbox"/> Preliminary Amendment | | Pages |
| 12. | <input checked="" type="checkbox"/> Return Receipt Postcard | | Pages 1 |
| 13. | <input type="checkbox"/> Certified Copy of Priority Document | | Pages |
| 14. | <input type="checkbox"/> Nonpublication Request | | Pages |
| 15. | <input checked="" type="checkbox"/> Constructive Petition | | Pages 1 |
| 16. | <input type="checkbox"/> Limited Authorization | | Pages |
| 17. | <input checked="" type="checkbox"/> VAS Utility Patent Application Transmittal | | Pages 1 |
| 18. | <input type="checkbox"/> Other | | Pages |
| 19. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment or in an Application Data Sheet <input type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input type="checkbox"/> Continuation-in-part Of prior application no. Prior Application Information: Examiner Group Art Unit For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. | | | |
| 20. TOTAL NUMBER OF PAGES 33 | | | |
| 21. CORRESPONDENCE ADDRESS <div style="text-align: center; font-size: 2em;">490</div> | | | |
| INSERT CUSTOMER NUMBER LABEL ABOVE | | | |
| Nam | Scott Q. Vidas, R g. No. 30,812 | | |
| Signature |  | | Date 8/18/2003 |

03917 U.S. PTO
10/643239
08/18/03

17638 U.S. PTO
08/18/03

FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 750.00)

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None
☐ Deposit Account:

Deposit Account Number: 22-0350

Deposit Account Name: Vidas, Arrett & Steinkraus

The Commissioner is authorized to: (check all that apply)

☐ Charge the fee(s) indicated below ☒ Credit any overpayments

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description | Fee Paid |
|----------------|-----------------|----------------|-----------------|------------------------|----------|
| 1001 | 750 | 2001 | 375 | Utility filing fee | \$750.00 |
| 1002 | 330 | 2002 | 165 | Design filing fee | --- |
| 1003 | 520 | 2003 | 260 | Plant filing fee | --- |
| 1004 | 750 | 2004 | 375 | Reissue filing fee | --- |
| 1005 | 160 | 2005 | 80 | Provisional filing fee | --- |

SUBTOTAL (1) (\$ 750.00)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| 11 | -20** = | X | 0 |
| Independent Claims | 1 | -3** = | 0 |
| Multiple Dependent | | | |

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description |
|----------------|-----------------|----------------|-----------------|--|
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 |
| 1201 | 84 | 2201 | 42 | Independent claims in excess of 3 |
| 1203 | 280 | 2203 | 140 | Multiple dependent claim, if not paid |
| 1204 | 84 | 2204 | 42 | ** Reissue independent claims over original patent |
| 1205 | 18 | 2205 | 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ -0-

** or number previously paid, if greater; For Reissues, see above

Complete if Known

| | |
|----------------------|-----------------------|
| Application Number | Not Yet Assigned |
| Filing Date | Concurrently Herewith |
| First Named Inventor | KIM, Ig Samg, et al. |
| Examiner Name | Not Yet Assigned |
| Art Unit | Not Yet Assigned |
| Attorney Docket No. | S40.2-11278-US01 |

FEE CALCULATION (continued)

3. ADDITIONAL FEES

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description | Fee Paid |
|-----------------------------------|-----------------|----------------|-----------------|---|----------|
| 1051 | 130 | 2051 | 65 | Surcharge-late filing fee oath | --- |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet | --- |
| 1053 | 130 | 1053 | 130 | Non-English specification | --- |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for <i>ex parte</i> reexamination | --- |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | --- |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | --- |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | --- |
| 1252 | 410 | 2252 | 205 | Extension for reply within second month | --- |
| 1253 | 930 | 2253 | 465 | Extension for reply within third month | --- |
| 1254 | 1,450 | 2254 | 725 | Extension for reply within fourth month | --- |
| 1255 | 1,970 | 2255 | 985 | Extension for reply within fifth month | --- |
| 1401 | 320 | 2401 | 160 | Notice of Appeal | --- |
| 1402 | 320 | 2402 | 160 | Filing a brief in support of an appeal | --- |
| 1403 | 280 | 2403 | 140 | Request for oral hearing | --- |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | --- |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | --- |
| 1453 | 1,300 | 2453 | 650 | Petition to revive - unintentional | --- |
| 1501 | 1,300 | 2501 | 650 | Utility issue fee (or reissue) | --- |
| 1502 | 470 | 2502 | 235 | Design issue fee | --- |
| 1503 | 630 | 2503 | 315 | Plant issue fee | --- |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | --- |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | --- |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | --- |
| 8021 | 40 | 8021 | 40 | Recording of each patent assignment per property (times number of properties) | --- |
| 1809 | 750 | 2809 | 375 | Filing a submission after final rejection (37 CFR 1.129(a)) | --- |
| 1810 | 750 | 2810 | 375 | For each additional invention to be examined (37 CFR 1.129(b)) | --- |
| 1801 | 750 | 2801 | 375 | Request for Continued Examination (RCE) | --- |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | --- |
| Other fee (specify) _____ | | | | | |
| *Reduced by Basic Filing Fee Paid | | | | | |
| SUBTOTAL (3) | | | | | (\$) |

SUBMITTED BY

Complete (if applicable)

| | | | | | |
|-------------------|----------------|------------------|--------|-----------|--------------|
| Name (Print/Type) | Scott Q. Vidas | Registration No. | 30,812 | Telephone | 952-563-3000 |
| Signature | | (Attorney/Agent) | | Date | 08/18/2003 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|------------------------------|---|
| In re Application of: | KIM, Ig Saeng, et al. |
| Application No.: | Not Yet Assigned |
| Filed: | Concurrently Herewith |
| For: | Heat Driven Acoustic Orifice Type Pulse Tube Cryocooler |
| Examiner: | Not Yet Assigned |
| Group Art Unit: | Not Yet Assigned |

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Docket No.: S40.2-11278-US01

**CONSTRUCTIVE PETITION FOR EXTENSION OF TIME AND FEE
AUTHORIZATION PURSUANT TO 37 C.F.R. §1.136(a)(3)**

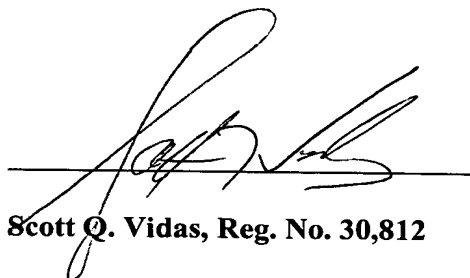
Applicant hereby requests that the United States Patent and Trademark Office treat any concurrent or future reply requiring a petition for an extension of time pursuant to §1.136 for its timely submission as incorporating therein a petition for an extension of time for the appropriate length of time.

Applicant authorizes the Commissioner of Patents and Trademarks to charge all required extension of time fees that have not otherwise been paid to Deposit Account No. 22-0350.

Respectfully submitted,
VIDAS, ARRETT & STEINKRAUS

Date: August 18, 2003

By:


Scott Q. Vidas, Reg. No. 30,812

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Minnetonka, MN 55343-9185
Telephone: (952) 563-3000
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